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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,917	02/11/2004	Robert William Dobbs	200209626-1	5500

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INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER

BUTLER, DENNIS

ART UNIT	PAPER NUMBER
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2115

NOTIFICATION DATE	DELIVERY MODE
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12/22/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/777,917	Applicant(s) DOBBS ET AL.	
	Examiner Dennis M. Butler	Art Unit 2115	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. This action is in response to the RCE and amendment filed on December 8 2008.

Claims 1-22 are pending.

DETAILED ACTION

Specification

2. The disclosure is objected to because of the following informalities: Applicant must amend the specification to provide the missing application numbers of the incorporated reference in pages 2 and 6 of the specification.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification fails to disclose that all sources are co-located with each other in the bank of sources as recited in independent claims 1, 11 and 22 and as argued by applicant in pages 7-9 of the amendment. As argued by applicant, power utilities do not provide a power source at a customer's location. Applicant argues that a power source provided by a power utility is located at the location of the power utility where the power generator is located. Therefore,

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Applicant does not acknowledge that power utilities provide a source of power at each customer's location. Applicant's specification discloses that a first group of sources is an AC source. However, applicant's specification does not disclose a power generation plant co-located with all of the sources in the bank of sources that generates the AC power source. Applicant's specification is silent as to the co-location of all the sources in the bank of sources. In addition, applicant has failed to show where the specification provides support for the amendments to claims 1, 11 and 22.

Claim Rejections

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

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under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1, 7 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Toy, U. S. Patent 6,191,500.

Per claims 1 and 22:

A) Toy teaches the following claimed items:

1. a power distribution system with figures 2 and 3;
2. a bank of loads with critical loads 230 of figures 2 and 3, at column 4, lines 1-3 and at column 5, lines 36-51;
3. a bank of sources including a first group of sources (power feed of utility source #1, secondary main switchboard #1, UPS #1 and UPS #2) and a second group of sources (power feed of utility source #2, secondary main switchboard #2, UPS #3 and UPS #4) wherein all of the sources are co-located with each other in the bank of sources with figures 2-3 and 5, at column 2, lines 10-18, at column 4, lines 27-36 and 57-59, at column 6, lines 14-23 and at column 9, line 64 – column 10, line 42;
4. an interconnect arrangement including a plurality of interconnects that, in a first (normal) mode, are operable to connect each source of the first and second groups to at least one of the loads such that each of the sources in the first and second groups provides power to at least one of the loads, and that, in a

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second (failure) operating mode during which one or more of the sources is inoperable to provide power, are operable to cause each of the loads to remain fully powered by at least one source in one of the first and second groups with switch boards 340 A and B, UPS paralleling switchgear 370 and ring switchgear 380 of figure 3, at column 2, lines 10-18, at column 4, lines 27-59 and at column 19, lines 48-67.

Per claim 7:

Toy discloses that the first group of sources are AC sources with the power feed of utility source #1, secondary main switchboard #1, UPS #1 and UPS #2 of figure 3, at column 6, lines 14-23, at column 9, line 64 – column 10, line 21 and at column 11, lines 34-37.

9. Claims 2-6 and 8-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toy, U. S. Patent 6,191,500 in view of Slade et al., U. S. Patent 5,861,684.

Per claims 9 and 11:

A) Toy teaches the following claimed items:

1. a power distribution system with figures 2 and 3;
2. a bank of loads with critical loads 230 of figures 2 and 3, at column 4, lines 1-3 and at column 5, lines 36-51;
3. a bank of sources including a first group of AC sources (power feed of utility source #1, secondary main switchboard #1, UPS #1 and UPS #2) and a second group of sources (power feed of utility source #2, secondary main switchboard #2, UPS #3 and UPS #4) wherein all of the sources are co-located

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with each other in the bank of sources with figures 2 and 3, at column 2, lines 10-18, at column 4, lines 27-36 and 57-59, at column 6, lines 14-23 and at column 9, line 64 – column 10, line 42;

4. an interconnect arrangement including a plurality of interconnects that, in a first (normal) mode, are operable to connect each source of the first and second groups to at least one of the loads such that each of the sources in the first and second groups provides power to at least one of the loads, and that, in a second (failure) operating mode during which one or more of the sources is inoperable to provide power, are operable to cause each of the loads to remain fully powered by at least one source in one of the first and second groups with switch boards 340 a and B, UPS paralleling switchgear 370 and ring switchgear 380 of figure 3, at column 2, lines 10-18, at column 4, lines 27-59 and at column 19, lines 48-67.

B) The claims differ from Toy in that Toy fails to explicitly teach that the second group of sources are a group of DC sources as claimed.

C) However, Toy describes providing a second utility source (utility source #2 110B) and discloses that the utility source could be any source of electric power that is normally used to provide power to critical load 230 (computer systems) at column 4, lines 42-44. Slade teaches that it is known to provide redundant uninterruptible power to large computer systems by using a utility source comprising a second group of power sources (battery A-D, elements 18-21 in figure 1) that are a group of DC sources with figure 1, at column 1, lines 12-20

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and at column 1, line 44 – column 2, line 6 and at column 3, lines 51-61. It would have been obvious to one having ordinary skill in the art at the time the invention was made that the power distribution system of Toy could have included a second group of sources that were a group of DC sources, as taught by Slade, in order to provide an alternate type of power source capable of maintaining full uninterrupted power to critical loads when one or more of the AC power sources fail. It would have been obvious for one of ordinary skill in the art to combine Toy and Slade because they are both directed to the problem of providing uninterruptible power to critical loads (large computer systems) in a power distribution system.

Per claims 2-6, 8, 10 and 12-21:

Claims 2-6, 8, 10 and 12-21 recite various configurations of loads and corresponding power source configurations. Both Toy and Slade disclose that the system power requirements are determined by the power requirements and the amount of redundancy desired at the site see Toy at column 1, lines 26-50 and column 17, lines 5-20 and see Slade at column 2, lines 1-13. Therefore, the particular load and power source configurations are design choices and it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide various power source configurations that match the power requirements of the loads being powered and the desired redundancy of the site.

Response to Arguments

10. Applicant's arguments filed on December 8, 2008 have been fully considered but they are not persuasive.

In the Remarks, applicant has argued:

A) Applicant understands Toy to teach that two of Toy's utility sources are located remotely from each other. Toy does not teach that all of said sources are co-located with each other in said bank of sources.

B) There is no motivation to combine the teachings of Toy and Slade because Toy teaches away from the suggested modification.

11. Regarding point A, the examiner disagrees with applicant's contentions. Toy discloses that power is supplied to the system of figure 3 via two feeders from two utility sources located remotely from one another. The feeder from each utility source will terminate in a transformer complete with switchgear, metering and secondary main circuit breaker (col. 6, lines 14-21). Toy further discloses that the feeds from the utility sources terminate at the secondary main switchboards 340A and 340B and each of the secondary main switchboards supplies power to the system (col. 9, line 64 – col. 10, line 21). Therefore, Toy clearly discloses that each utility source provides a power source at the location of the system of figure 3 via the two feeders to the secondary main switchboards. The power sources of the secondary main switchboards are co-located with each other in the bank of sources (power feed of utility source #1, secondary main switchboard #1, UPS #1 and UPS #2, power feed of utility source #2, secondary main switchboard #2, UPS #3 and UPS #4) as shown in figure 3. Therefore,

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Toy clearly discloses that all of the sources are co-located with each other in the bank of sources.

Regarding point B, the examiner disagrees with applicant's contentions. Toy does not teach away from the suggested modification. As described above in connection to point A, Toy clearly discloses that all of the sources are co-located with each other in the bank of sources. In addition, Toy discloses that the utility source could be any source of electric power that is normally used to provide power to critical load 230 (computer systems) at column 4, lines 42-44. Therefore, Toy clearly suggests using other types of sources of electric power. Toy also discloses using a battery source as a backup source at column 5, lines 8-14. Slade teaches that it is known to provide redundant uninterruptible power to large computer systems by using a utility source comprising a second group of power sources (battery A-D, elements 18-21 in figure 1) that are a group of DC sources with figure 1, at column 1, lines 12-20 and at column 1, line 44 – column 2, line 6 and at column 3, lines 51-61. It would have been obvious to modify Toy by providing a group of DC sources co-located with a source bank, such as Slade's battery group, in order to increase reliability as the battery group can continue to provide power after an AC utility source failure.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis M. Butler whose telephone number is 571-272-

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3663. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Dennis M. Butler/
Primary Examiner, Art Unit 2115

Dennis M. Butler
Primary Examiner
Art Unit 2115